

Amendments to the Drawings:

The attached sheet of drawings includes changes to Fig. 1b; Fig. 2a; Fig. 2b, and includes new Figure 9. This sheet, which includes Figs. 1a, 1b, 2a, 2b, 3, 4a, 4b, and 9 replaces the original sheet including Figs. 1a, 1b, 2a, 2b, 3, 4a, 4b.

Attachment: Replacement Sheet

Remarks

In the Office Action dated September 20, 2004, the Examiner objected to the drawings. The Examiner rejected claim 12 under 35 U.S.C. § 112, second paragraph. The Examiner rejected claims 1-21 under 35 U.S.C. § 103 as being unpatentable over the U.S. Patent to Gopanchuk, et al. 5,798,602. The Examiner also provisionally rejected claims 1-21 under the judicially created doctrine of obviousness-type double patenting.

By this amendment Applicants' Attorney has modified claim 12 and has also amended many of the claims including each of the independent claims to more particularly point out and distinctly claim what Applicants regard as their invention. In particular, each of the independent claims has been amended to make it clearer that the axial magnetic field is azimuthally varying to substantially eliminate microwave noise.

The U.S. Patent to Gopanchuk, et al., as admitted by the Examiner, does not disclose an azimuthally varying axial magnetic field to substantially eliminate noise and is not concerned with substantially eliminating microwave noise. In fact, a word search failed to find the word "noise" anywhere in the Gopanchuk, et al. patent.

Also, the magnetic field in Gopanchuk, et al. is azimuthally-symmetric and does not vary with rotation about its longitudinal axis (A-A).

Furthermore, Gopanchuk, et al. does not describe a magnetron, rather it is a plasma accelerator (thruster) in which the magnetic field is radial and the electric field is axial. This is just the opposite for magnetrons.

Furthermore, Gopanchuk, et al. does not generate electron spokes as in a magnetron.

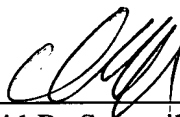
Consequently, in view of the above, it is respectfully submitted that the Examiner has not presented a *prima facie* case of obviousness.

Enclosed herewith is a Terminal Disclaimer to overcome the Examiner's rejection under the judicially created doctrine of obviousness-type double patenting.

Also enclosed herewith are amended and new drawing figures wherein no new matter is entered. The drawings now show the electric circuit (i.e. elec. ckt.) for generating a radial electric field, the axial magnetic field which is azimuthally varying, the cathode and anode, and the crossed-field amplifier.

Respectfully submitted,

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